## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

## (19) World Intellectual Property Organization International Bureau



## 

(43) International Publication Date 6 May 2004 (06.05.2004)

(10) International Publication Number WO 2004/038423 A2

(51) International Patent Classification7:

G01N 33/68

[US/US]; 2016 Hidden Glen Drive, Marietta, GA 30067 (US).

P.L.C., 660 Woodward Avenue, Suite 1525, Detroit, MI

(21) International Application Number:

PCT/US2003/033819

(22) International Filing Date: 23 October 2003 (23.10.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

60/421,021

23 October 2002 (23.10.2002)

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US

60/421,021 (CON)

Filed on 23 October 2002 (23.10.2002)

- (71) Applicant (for all designated States except US): NA-TIONAL DIAGNOSTICS, INC. [US/US]; A Corporation Organized and Existing under the Law, s of the State of Georgia, 305 Patton Drive, Atlanta, GA 30336 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): KITZLER, Jeffrey [US/US]; 1663 Cartwright Court, Decatur, GA 30067 (US). WERNER, David [US/US]; 175 Glenloch Parkway, Stockbridge, GA 30281 (US). IBRAHIM, Abdul

(74) Agents: ROHM, Benita, J. et al.; Rohm & Monsanto,

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC,

UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA,

(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

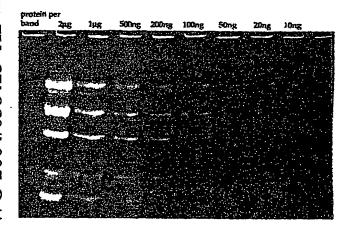
## Published:

48226 (US).

without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: IN-GEL FLUORESCENT PROTEIN STAINING TECHNIQUE



(57) Abstract: An "in-gel" staining technique for detecting and/or separating proteins during electrophoresis, illustratively as a modification of the standard Laemmli procedure. A fluorescent dye, such as Nile red or Phosphine, is included in the running buffer (mobile phase) which may be a standard Laemmli Tris-Glycine SDS buffer that has been modified to reduce the concentration of detergent (SDS) to less than the typical concentration (0.10%v/v). The fluorescent dye stains proteins during electrophoretic separation. The post-electrophoretic operations are, therefor, reduced and the separated, stained fractions are recoverable for further processing, purifying or analysis.

WO 2004/038423 A2

BEST AVAILABLE COPY